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Posted: Monday, July 3, 2000, at 10:30 a.m. PT



I went to church yesterday morning—the Mount Gilead Baptist Church on 13th Street, NW, in Washington, D.C., just two blocks from my home off Logan Circle, It was a joyous, exuberant, gospel-thumping, loud-singing, praise-the-Lord kind of service, but I was there for work. I'm a geneticist, you see.

What's a gene guy like me doing in church? Well, I happen to study human behavior, and about a year ago I began to wonder whether there are genetic underpinnings to religious belief and spirituality. It might seem a bit wacky, but it's not a new idea. The first chapter of The Varieties of Religious Experience—the seminal book by William James, 19th-century forefather of American psychology—is entitled "Neurology and Religion." More recently, biologists such as E. O. Wilson have made a strong case that religion is evolutionarily advantageous at both the group and individual levels.

Although Mount Gilead is a predominantly African-American church located in a gentrified neighborhood that is now predominantly white, it is nearly full even on this beautiful Sunday morning. There are ostrich-plumed women of a certain age with their grandchildren in tow, white-garbed church ladies with their dark-suited husbands, a sprinkling of young couples, and one lone white guy. When the pastor asks whether there are any visitors to the church, I can't very well



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hide.

I am not surprised at the number of attendees. We Americans are religious people. More than 95 percent of us believe in God, 60 percent attend church on a regular basis, and 50 percent believe in the biblical account of creation.

Why do so many of us believe in something we cannot see, smell, hear, or touch? Why is religion as strong today, despite all the miracles of modern science, as it was thousands of years ago?

I suspect that the answer is, at least in part, hardwired into our genes—that religion is an instinct. We usually think of instincts as automatic, unconscious reactions that are performed without thought or training, like blinking your eye when someone takes a swing at you or becoming aroused when presented with a sexual stimulus. By contrast, religious behaviors such as meditating or praying seem like highly deliberate and culturally learned activities. But things are not always as they seem, especially when it comes to human behavior. Our genes can have profound effects that we are not consciously aware of. We can believe that we are acting out of logic or morality when in fact our thoughts and feelings are being channeled by DNA sequences selected over millions of years of evolutionary history.

Religion certainly has many of the properties of genetic traits: It's durable, ubiquitous, and remarkably constant across cultures. There are even some twin studies showing that it's influenced by heredity. But proving that point, and actually finding the genes, is going to take a lot of hard work—a lot of DNA extractions and genotyping markers and computing linkage statistics and all the other things we do at my laboratory at the National Institutes of Health in Bethesda, Md., a few miles outside of the district.

One difficulty I face in this particular line of research is lack of firsthand knowledge. When I started working on the genetics of cigarette smoking, it actually helped to be a smoker. As a two-pack-a-day man, I knew from personal experience the addictive power of nicotine. (I managed to quit one and a half years ago with the help of Zyban, a drug that blocks the dopamine transporter—a molecule that our genetic research later showed was an important player in smoking cessation.) But when it comes to religion, I'm a neophyte. That's why I've been going to church every Sunday for the last year or so.

The service is inspiring. It evokes the feeling of joy mixed with calmness that I often get in church or temple or a mosque. When I get home I jot down some notes for the book I'm working on, tentatively titled *The God Gene*, while my impressions are still fresh. Then it's off to the basketball court, dinner at a Salvadoran place, and early to bed. There's going to be a lot of stuff waiting for me to do when I get

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back to the lab tomorrow morning. Reminder: Go to the gym.

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